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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/500,076	11/15/2004	Jincheng Wang	14565.0002USWO	5859
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52835 7590 05/31/2007
HAMRE, SCHUMANN, MUELLER & LARSON, P.C.
P.O. BOX 2902
MINNEAPOLIS, MN 55402-0902

EXAMINER

BONZO, BRYCE P

ART UNIT	PAPER NUMBER
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2113

MAIL DATE	DELIVERY MODE
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05/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/500,076

Applicant(s)

WANG ET AL.

Examiner

Bryce P. Bonzo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 June 2004.
- 2a) This action is **FINAL**.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 June 2004 is/are: a) accepted or b) objected to by the Examiner.
 - Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 - Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 - Paper No(s)/Mail Date 6/23/04.
- 4) Interview Summary (PTO-413)
 - Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

NON-FINAL OFFICIAL ACTION

Status of the Claims

Claims 1, 2, 5, 6 and 7 are rejected under 35 USC §102.

Claims 3 and 4 are rejected under 35 USC §103.

Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 5, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Gan (United States Patent No. US 7,013, 139 B1).

As per claim 1, Gan discloses:

A method for backup of Home Location Register (HLR), comprising:

configuring a universal HLR as a disaster recovery center HLR which is used to backup multiple HLRs, then establishing network connections between each operating active HLR and said disaster recovery center HLR, and then loading subscriber data of each active HLR to said disaster recovery center HLR through uniform text files which

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describe standard services of the protocol in a standard format (column 4, lines 1-15; the texts files claimed are subscriber records, and under SS7, and GSM those files are uniform text documents with a very structured table set);

During normal operation, synchronizing varied data of said active HLRs to said disaster recovery center HLR (column 4, lines 58-63);

If an active HLR fails, forwarding the signaling which is sent to said fault active HLR to the disaster recovery center HLR to process through modifying route configuration of the corresponding service switching point (column 3, lines 45-60);

recovering the data of said active HLR by said disaster recovery center HLR through uniform text files after said active HLR recovers, redirecting the signaling to said active HLR from said disaster recovery center HLR through modifying route configuration of the corresponding service switching point after the data of said active HLR and disaster recovery center HLR is consistent (column 4, lines 34-44).

2. A method for backup of HLR according to claim 1, wherein each of said uniform text files contains a special field for recording the unique service in the internal format of the corresponding active HLRs (inherent to the HLR under GSM).

5. A method for backup of HLR according to claim 1, wherein synchronizing the varied data of said active HLRs to said disaster recovery center HLR is implemented by transferring varied subscriber data with the format of uniform text files (column 6, lines 26-55).

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6. A method for backup of HLR according to claim 1, wherein said modification of route configuration of the corresponding service switching points refers to automatic or manual signaling switching with different configuration method (column 6, lines 3-4).

7. A method for backup of HLR according to claim 1, wherein said operating active HLRs and said disaster recovery center HLR are connected by private lines (Gan clearly disclose a set of communication paths accessible only to HLRs and administrators, and thus private)

Rejections under 35 USC §103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gan.

As per claim 3, Gan does disclose:

wherein configure each disaster recovery center HLR and each operating active HLR with a communication device responsible for external communication, respectively, the communication device of each active HLR is designed to convert varied subscriber data

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into uniform text files and store said files under the specified directory of each active HLR obtaining said files of varied subscriber data from said specified directory periodically. (column 6, lines 25-55).

Gan does not explicitly disclose:

...the communication device of the disaster recover center HLR is designed to record IP addresses of said active HLRs through configuration files...

Official Notice is given that it is notoriously well known in the commuting arts to record IP address of computers for file transport. IP is a widely known addressing system for computer networks, offering many advantages in flexibility and ubiquity. Under TCP/IP an IP address is required for transport of information. Thus it would have been obvious to one of ordinary skill to implement the data transfer of Gan over IP, thus allowing all the well held advantages of IP to be leveraged during transport.

As per claim 4, Gan discloses:

wherein said uniform text files are stored in fixed length and transmitted between the disaster recovery center HLR and the active HLRs (column 6, lines 25-55).

Gan does not explicitly disclose:

the use of FTP to transfer the files.

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Official Notice is given that it is notoriously well known to transport files over FTP. FTP is the well known file moving suite provided for in TCP/IP used in almost all modern data transmission. Thus it would have been obvious to one of ordinary skill in the art of computing to implement the data transfer of Gan as TCP/IP and thus using the well known protocol gaining its inherent support and availability.

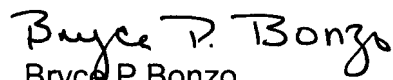
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P. Bonzo whose telephone number is (571)272-3655. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Bryce P Bonzo
Primary Examiner
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